

**The City of Harrisburg
Mayor Stephen R. Reed**

**OFFICE OF THE
CITY ENGINEER**

2002 ANNUAL REPORT

**Joseph V. Link
City Engineer**



Office of the Mayor

The City of Harrisburg

City Government Center
10 North Market Square
Harrisburg, PA 17101-1678

Stephen R. Reed

(717) 255-3040

Mayor

FOREWARD

I am pleased to commend to your reading this comprehensive report for the year 2002, one of the most progressive years in the history of the City of Harrisburg since we were first incorporated as a municipality in 1791.

Harrisburg has come a long way from when it was listed in the first half of the 1980s as the second most distressed city in the United States. There remains a great deal more to be done, and this annual report is issued as a means to identify our progress through the activities, projects and operations of the City of Harrisburg. Such a report as this is issued for each department of city government under the Mayor's authority.

Every city employee and each city agency are integral to the success of Harrisburg. The work and achievements of the current era have written a new chapter in the Capital City's and region's history and, for this, every city employee can take pride and credit.

The City of Harrisburg's government is the most diverse municipal government in Central Pennsylvania. Our services and operations range from the traditional large municipal functions related to police, fire, public works, and parks and recreation to the more unique, such as water, sewer, trash collection, solid waste incineration, energy generation, recycling, economic development, areawide data processing systems, contracted sludge processing, codes enforcement and conducting major special events. Intertwined into all these functions are the administrative support functions related to risk management, legal, data processing, personnel, purchasing, billing, debt collection and financial management services. Everyone's role is important and everyone contributes to the overall success and functioning of this city.

This past year has considerably added to the overall positive performance of this government in achieving major public policy goals. For example:

- (1) The Part I crime rate, considered to be the index by which crime is measured in communities, has dropped over 54% since 1981 and the crime rate is now at a 30 year low;
- (2) The fire rate, meaning the number of fires per year, has dropped over 76% since 1982, and is now at its lowest level since citywide records have been kept;

- (3) The number of businesses on the city's taxrolls, counted at 1,908 by the end of 1981, is now 5,976, the highest number ever recorded;
- (4) The taxbase, assessed at \$212 million in 1982, is now over \$1.6 billion, the highest level ever recorded in city history;
- (5) During the period of 1995 through 2002, the City broke the record four times for the amount of new economic development investments, setting new record levels in city history; in the current era, over \$3.1 billion has been invested in Harrisburg, also a new record for any similar time period in city history, even when adjusting for inflation; the year 2002 was our highest year ever, with \$269.7 million in new investment;
- (6) The annual cost of living index consistently lists Harrisburg as being one of the most affordable communities in the midstate in which to own a home;
- (7) The City, in 2002, for the fifteenth consecutive year, won the nation's top national award for financial reporting and accounting and, additionally, for the twelfth consecutive year, won the nation's top national award for budgeting; of over 2,560 municipalities in Pennsylvania, only 2 have attained the same status;
- (8) The City, in 2002, for the fifteenth consecutive year, retained Tree City U.S.A. status, the highest community conservation award in the nation; and recently, City parks and recreation activities and programs garnered over 30 international, national and state awards; the city's Advanced Wastewater Treatment Plant won first place in Pennsylvania in statewide operational, maintenance and safety competition amongst other plants; the Harrisburg History Project, which includes the placement of pedestrian-level placards marking city historic sites, received the Historic Harrisburg Association's Preservation Award; the City's Melrose Gardens Housing Project received the prestigious Bellamy Award from the Pennsylvania Housing and Redevelopment Agencies' Association, their highest recognition;
- (9) The City and region were selected by the state Chamber of Business and Industry as Pennsylvania's Outstanding Community for the year 2002, marking the second time Harrisburg has won the state's most prestigious municipal honor. Harrisburg was also selected as Pennsylvania's Outstanding Community in 1990.
- (10) The City retained National Police Accreditation, the highest recognition for law enforcement in the nation; of over 21,000 police agencies, only 443 have attained the same status;
- (11) The City attained top national and state awards for its transportation infrastructure improvements, its energy conservation efforts, its historic rehabilitation projects and a myriad of other City pursuits, making the City of Harrisburg the most award-winning municipality in Pennsylvania; the city's Vehicle Maintenance Center and its Director received the top international award from the Association of Fleet Administrators for the city's innovative vehicle purchasing program, which cuts vehicle purchase costs by 10% to 15% and has thus far saved the city and its fellow participating municipalities over \$6 million in reduced vehicle purchase costs;
- (12) Harrisburg continued to be one of the leading cities in the country in the creation of alternative energy and revenue sources; thus far, in the current era, the City has generated over 15.3 billion pounds

of steam, co-generated over 903 million kilowatts of electrical energy, saved over 9.6 million cubic yards of landfill space and produced energy equivalent to over 870 million gallons of foreign oil;

(13) The City has fully or partially funded projects that have resulted in new construction or restoration of over 5,000 residential units, in the form of homes and apartments, making Harrisburg the largest residential developer in Central Pennsylvania;

(14) Additional upgrades have occurred in the Harrisburg Parks System, now the largest municipal parks system in the Midstate and the only municipal parks system to play a continuous regional role; the City has invested over \$68 million in parks and playgrounds since 1982;

(15) Attendance figures continue to show Harrisburg as a dynamic center for recreation, arts and entertainment, with over 2.3 million in attendance for the city's various free, regional special events. The Harrisburg Senators again surpassed the quarter million attendance mark with 283,661 fans in 2002, a new annual record, and are now well over the 3.75 million mark in total attendance, and the Harrisburg Heat have drawn more than 1.2 million fans during their tenure at the State Farm Show Complex.

(16) Citywide neighborhood recreational programs attracted their largest annual attendance ever, with 571,688 attendance in 2002, a 5% increase over 2001, and a dramatic 19% increase since 2000;

(17) The City continued in its Class 7 designation under the National Flood Insurance Program; only three other municipalities in the Nation have an identical or better designation; the classification is the result of the City's floodplain management and emergency management programs; Harrisburg is the only municipality in Pennsylvania to be upgraded in its classification, and in Harrisburg's case, was upgraded three times, giving City property owners a 15% reduction in the base premium for flood insurance;

(18) The City's Fire Bureau is one of 27 Federally-designated Urban Search and Rescue teams, one of the groups available for deployment anywhere in the U.S. for a major national disaster; further, the Commonwealth of Pennsylvania contracted the City to serve as administrator of Pennsylvania Task Force One, which involves resources from across and outside the state, to respond to such emergencies; the City of Harrisburg and the state Task Force were the first team deployed to the World Trade Center on September 11, 2001, in response to the worst terrorist attack in United States history;

(19) In conjunction with its operation of Task Force One, the City has constructed a new Special Operations Center that now serves as the headquarters and staging center for the Task Force and other specialized emergency operations.

(20) As a result of the success of the first Task Force, a second Intra-State Task Force, for response solely within Pennsylvania, has been created by the State. Additionally, the Water Rescue Strike Team One, a sophisticated new marine rescue unit capable of handling water-related emergencies anywhere in the State, is now operational. Harrisburg administers both of these recent additions to the Pennsylvania Emergency Management System.

(21) In the area of community services, Harrisburg continues to be the most engaged municipality in the region in matters of affordable housing and sheltering the displaced. As a result of joint effort by the City, County and human service providers, a second major grant—for \$1,088,000—was secured for both short-term shelters as well as intensive homelessness abatement and prevention.

(22) City coordination and support have resulted in over 225 city blocks being adopted under the Adopt-A-Block beautification program, and another two dozen vacant lots are similarly cared for under the Adopt-A-Lot program; 29 citizens have been trained as citizen codes inspectors to assist city Codes Enforcement Officers, and over 200 citizens have now graduated from the city's innovative Citizens Police Academy, the first of its kind in the midstate; more than 100 city blocks and neighborhoods are now covered by neighborhood crime watch groups;

(23) On a daily and continuous basis, City agencies and personnel performed thousands of services and tasks, for which neither recognition nor attention were provided, but all of which served to enhance the quality of life in Harrisburg with benefit to citizens, businesses and visitors.

(24) The Commonwealth of Pennsylvania has committed \$12 million to the planned new city university, Harrisburg Polytechnic Institute, and the Institute's Preparatory School and Business Incubator will soon open in a restored 83,000 sq. ft. former vacant site in the 200 block of Market Street. More than \$9 million in renovations are currently underway in the former YWCA site.

All should know and understand that American cities continue to face major challenges, frequently involving forces and factors over which a local government has no control. Our gains here have been the result of vision, struggle, persistence and arduous effort. The resurgence of Harrisburg in the current era has reversed previous decades of decline but we, too, are subjected to the unique burdens which the Nation and region place solely upon cities. It remains critically important that each of us rededicate ourselves to the furtherance of Harrisburg's best interests as we carry forth our respective roles and duties. The collective and individual efforts of Harrisburg's employees have made history. We owe it to the people we serve to build upon our present day progress by continuing our commitment to a constant, daily effort to be the best at what we have been hired to do for this City.

To the citizens and taxpayers of Harrisburg we dedicate this comprehensive annual report and our full measure of devotion in the days ahead.

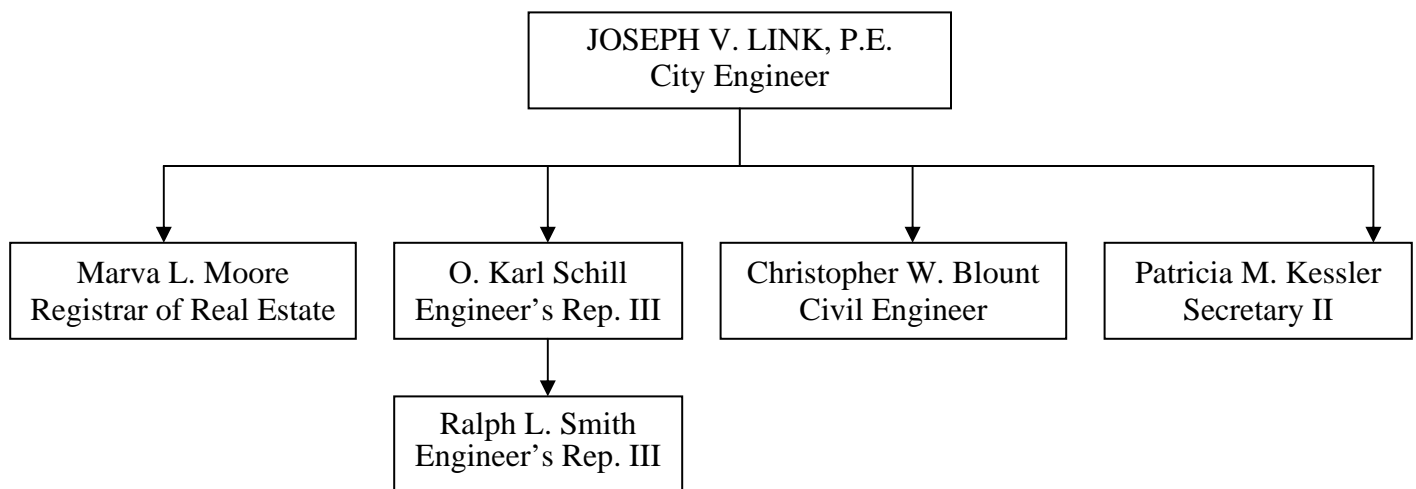
A handwritten signature in black ink, reading "Stephen Reed". The signature is stylized with a large, looped "S" and a cursive "Reed".

Stephen R. Reed
Mayor

CITY OF HARRISBURG

DEPARTMENT OF GENERAL GOVERNMENT OFFICE OF THE CITY ENGINEER

2002 PERSONNEL DIRECTORY



EMPLOYEE	POSITION	DATE OF EMPLOYMENT
Joseph. V. Link, P.E.	City Engineer	01/06/92
Christopher W. Blount	Civil Engineer	05/14/01
Marva L. Moore	Registrar of Real Estate	08/30/76
O. Karl Schill	Engineer's Representative III	11/04/85
Ralph L. Smith	Engineer's Representative III	01/19/93
Patricia M. Kessler	Secretary II	06/23/80

OFFICE OF THE CITY ENGINEER

Joseph V. Link, P E

City Engineer

2002 ANNUAL REPORT

DUTIES AND RESPONSIBILITIES:

The City Engineer shall perform such duties as shall be prescribed with reference to the construction, reconstruction, maintenance and repair of all streets, pavements, sewers, bridges, culverts and other engineering work. He shall prepare plans, specifications, and estimates for all such work undertaken by such city, and shall, whenever required, furnish council, the committees thereof, the mayor, public boards, or heads of departments, with reports, information or estimates on any city engineering work, or on questions submitted by any of them in their official capacity. The City Engineer shall cause to be made all such necessary books, maps and plans as will show the situation and dimensions of each property therein, which books, maps or plans shall be so prepared as to show the city number, and name of the owner or owners thereof.

GOALS: This office established a set of long term goals beginning in 1994. Current status is reported annually until goal is achieved, then it is dropped from the report.

- **1994 Development of Streetscape Standards**

Formalize standards for construction of “Downtown Area” streetscape including sidewalk construction/renovation, planting trees, street lighting and overhead street name signs.

Modification of Goal

This office expanded the scope of this goal to include the purchase of the City streetlighting system and to replace the “cobra head” light fixtures in the downtown district with modern fixtures manufactured in the “turn of the century” styles. Street light poles will be used to carry traffic signals, parking meters and street name signs.

Status (1999)

This office published standard construction details for sidewalk construction with granite curb and brick edge and standard concrete curb. A master plan of the downtown streetlight system was developed and is in use. Purchase of the streetlight system is in negotiation and may lead to financing for replacement of streetlights in the Downtown District.

Status (2000)

This office and the City Bureau of Planning consulted with the Mayor's Millennium Commission, Beautification Subcommittee to prepare a document that catalogued the existing streetscape in the Central Business District and then established standards and materials for the City to adopt for renewals, upgrades and new construction. Materials, products and standards are specified for reconstruction of sidewalks, installation of streetlights, planting of trees and installation of various types of street furniture.

Status (2001)

On June 4, 2001, the City purchased the streetlight system except for the portion of lighting in the Central Business District. That portion was omitted because additional time was needed to determine how to separate the light fixtures from the underground electrical distribution system in the area and the estimated cost was prohibitive. By the end of the year, the decision was made to pursue purchase of the CBD streetlight system with replacement of the fixtures with historic style lighting.

Status (2002)

By Agreement dated 11-1-2001, the Commonwealth provided \$3.1 million to the City for design and construction of a Streetscape project to install streetlights and street trees on streets in the Central Business District (CBD) that border or lead to the Capitol Complex or any street that houses a Commonwealth Office. The City selected a lighting consultant and a landscape consultant to design the project and negotiated a scope of work and design price with them. By letter dated April 10, 2003, the Commonwealth approved the City's plan to commence design and

construction, and the City issued a Notice To Proceed to its consultants. The full scope of the project is expected to cost between \$7million and \$8 million, and the City received a commitment from the Department of Transportation to loan the balance of the funding to the City at approximately one-half of the prime interest rate for a ten-year period. Application for the loan will be submitted as soon as the consultants prepare a detailed cost estimate.

During the last year, the City completed construction of two major streetscape projects. The Capitol Heights Housing project in Midtown included new sidewalks, trees & historic style streetlights. New historic style streetlights and trees were installed under the Capitol Corridors project on several main streets in the Midtown and Allison Hill sections of the City. Both projects are detailed later in this report.

- **1994 Infrastructure Renewal**

Collect existing measurements, construction materials and pavement conditions of City streets for Pavement Evaluation Program.

Status (1998):

Much of the desired information has been collected and is available. This office and others assisted the City Planning Bureau with funding to upgrade the GIS software.

Status (1999):

Activation of the GIS is a disappointment to this office. Although various bureaus have contributed funding for software and hardware upgrades, the system is not functional. Despite continuous discussion, it is not possible to create maps or upgrade infrastructure changes on the system. The City traffic control system should also be on this database, but it is not possible to do so at this time.

Status (2001)

The City GIS system was significantly improved during the 2001 calendar year with the approval of a line item in the budget in the amount of \$72,000 for GIS Upgrade and System Management by the engineering consulting firm of Skelly &

Loy. The existing GIS system was transferred into a more powerful software package to allow more efficient update of various maps and databases. The acquisition of new software has improved accessibility to the system and increased the scope of the City's GIS capabilities. As a result, a GIS website has been created to allow City staff to view, print, and query GIS maps and several important applications for GIS information have been developed. The approved City budget for 2002 includes a line item in the amount of \$100,000 to continue the efforts with Skelly & Loy.

As a pilot program, to demonstrate the functionality of the new software, this office planned and initiated the development of a street-cut management program within the GIS system. The creation of the street-cut system allowed staff to track each street-cut application electronically through the use of a street-cut map and an interactive database. The street-cut system can be accessed via the internet, laptop computer, or the LAN network in the City Government Center. This program not only allowed staff to track information, but also to have the ability to easily search past permits and generate reports and mailing lists. Much of the "data clean-up" required to create the street-cut management system has laid the groundwork to develop additional computer applications for GIS information. It is anticipated that in 2002 the street-cut program will be expanded to allow applications to be received and paid via the internet.

In conjunction with the purchase of the streetlight system, GIS mapping and databases have been developed to inventory and locate the 5400+ light fixtures now owned and maintained by the City. GIS maps of the streetlight system are used to assist in dispatching for routine and emergency maintenance and to keep maintenance records for each streetlight fixture. In 2002 this system will be further developed to allow for electronic invoicing for maintenance efforts and automatic updates of maintenance records as work is completed.

In addition to funds from the City budget, this office has received and continues to pursue grant money to further the enhancement of the GIS system. In 2001,

PA/DEP awarded a grant of \$180,120 to the City to perform a watershed analysis of the Paxton Creek, which included \$32,400 to enter related data onto the GIS. The City is utilizing these funds to update and improve the GIS maps and databases of the sewer system. FEMA awarded a grant of \$60,000 (\$30,000 in 2002 and \$30,000 in 2003) to create new digital flood plain maps for the Paxton Creek, with all data to be entered on the GIS. In 2002 a Dauphin County economic development grant in the amount of \$12,500 will be presented to the City and Steelton Borough to explore the possibility of exchanging, filing, and recording deeds electronically. It is anticipated that deeds could be received electronically from the Recorder of Deeds and routinely added to the City GIS database.

Status (2002):

With a budget of \$100,000 for 2002, the Office of the City Engineer was able to continue the enhancement of the City's Geographic Information System. This effort was accomplished through an extension of the contract with Skelly & Loy and with a GIS intern, funded by DEP.

The most notable accomplishment of 2002 was the completion of the streetlight maintenance tracking system. This system allows the City to track maintenance activities of subcontractors and automatically populates the GIS database with a maintenance history of each light serviced. This online application gives the City the ability to generate reports on maintenance activities, query the database to identify problem areas in the lighting network, and plan periodic mass re-lamping activities. This functionality allows the City to target maintenance in areas that haven't been serviced recently and avoid replacing newer equipment during mass re-lamping.

Through the use of an intern, funded through a DEP Growing Greener Grant, the entire sewer data layer has been updated and reconstructed. The new GIS layer for the sewer network contains depth and grade information for almost all sewers in the City. This extensive database is being utilized by the Harrisburg Authority as a basis for developing a hydraulic model of the interceptor sewer system.

In 2002 the Office of the City Engineer continued to make improvements to the on-line street cut permit management system. Currently UGI and the Water Bureau are utilizing the online permit system. NRG Energy, Verizon and PPL will begin utilizing the system in spring 2003. Negotiations are currently underway between the City Webmaster, the Treasury Department and the Commonwealth of Pennsylvania to give the City the ability to accept payments online.

Other significant development on the GIS includes enhancements and updates to the traffic control, centerline, right-of-way, and parcel data layers. This office has also been coordinating with Dauphin County to determine the feasibility of implementing an electronic deed filing system.

- **1994** **Street Resurfacing Program**

The established goal is to repair, maintain and resurface City streets.

Status (1997):

In 1988, the City began a street resurfacing program using capital improvement funds. Since then, all city streets have been resurfaced at a cost of \$9,581,317. Program scope included removal of old material to properly drain storm runoff, repair failed subbase areas, renew asphalt surface, repair and install storm inlets, clean all storm inlets, repair water valve access boxes and install access ramps at intersections.

- **1997** **Sewer Replacement**

The goal is to establish a formal program for replacement/reconstruction of City sewer lines.

Status (1999):

This Office began the task of identifying the segments of existing brick sewer that pose a significant possibility of collapse. Funding sources, program estimates

and phasing of replacement projects will be presented with budget requests.

- **1997 Stormwater Management**

To gather sufficient data concerning stormwater management problems to assess the situation and recommend a program and funding source.

Status (1998):

Preliminary information was provided to consultant who has been engaged by The Harrisburg Authority to set up a stormwater utility.

An analysis of Paxton Creek was completed with a matching grant from EPA through CEDA COG to determine whether improvements could be made to the structures at Wildwood Lake to minimize downstream flooding during summer thunderstorms. The analysis pointed out a silt deposit at the confluence of Asylum Run that causes a surcharge in the vicinity of Maclay Street at the Farm Show Complex. There is also a negative slope in the stream bed near the Asylum Run confluence that further compounds the situation with backups and flooding. A funding source is being sought to correct the problems.

Status (1999)

Under a PADEP “Growing Greener” program, the City submitted a request for a grant to analyze the entire Paxton Creek watershed. Storm related problem areas will be identified and solutions will be designed and funded if the grant request is approved and sufficient funds are made available to the City.

Status (2001)

DEP selected the City’s second submission for a grant to perform an analysis of the Paxton Creek and awarded a grant in the amount of \$183,120. The City in turn entered into a contract with the environmental consulting firm of Skelly & Loy to perform the analysis.

Status (2001)

Stormwater Management-The Paxton Creek Watershed Analysis was initiated by

Skelly & Loy after complying with DEP regulations. Field reconnaissance was completed and data collection and verification was started. This office hired a GIS Technician with a portion of the grant funds whose duties and responsibilities are to input the stream data into the computer database.

An additional grant request was submitted based on the initial data gathered. The request is for funds to modify the feeder streambed entrance to Wildwood Lake to direct the initial storm flows from the outfall to the portion of the stream that flows through the City and often causes flash flooding.

A second grant application is for funding to repair portions of the stream bank in the upper reaches of the watershed where significant erosion occurs. Decisions on the two applications will be made in mid 2002.

Status (2002)

Through funding from the PADEP “Growing Greener” program, the City has completed a watershed assessment for the Paxton Creek. This study identified various stormwater related problems in Harrisburg and upstream portions of the watershed and made recommendations for specific restoration projects. The City and Skelly & Loy presented a summary of the watershed assessment results to Lower Paxton Township, Susquehanna Township, DEP, Dauphin County Parks & Recreation and PCWEA. Copies of the completed study were distributed to presentation attendees.

PADEP awarded a second grant to the City to design a streambank restoration project on a portion of Paxton Creek known as Black Run. The purpose of this project is to stabilize a section of stream bank in Paxton Creek and help reduce sediment deposits in Wildwood Lake. The Office of the City Engineer has also submitted an application in the 2003 round of “Growing Greener” funding for a restoration project in the Bellevue Park area.

In summer 2002 work began on the FEMA floodplain mapping project. The purpose of this project is to create a hydrologic model digitally recreate the 50-

year and 100-year FIRM floodplain boundaries. Funding for this project is provided through a \$60,000 grant from FEMA. The anticipated project completion date is October 2003.

Projects

SOUTH FRONT STREET CONNECTOR

A single lane road and sound barrier are being constructed to divert traffic around the historic Shipoke neighborhood beginning at the intersection of South Front Street, Paxton Street and Race Street and reconnecting at South Front Street at a point near the I-83 overpass. Skelly & Loy, Inc. was selected as the lead consultant to perform the required environmental analysis with Baker Engineers as the design sub-consultant. This is a cost sharing project with 80% funding from FHWA/PennDOT and 20% City.

Status (1999)

Design was completed and the construction contract in the amount of \$1,946,698 awarded to Jay Fulkroad & Sons, Inc. Construction began in November 1999 and scheduled completion is June 2000.

Status (2000)

Construction was completed and open to traffic in November 2000. The final cost of the project including environmental analysis, design, construction and construction management is \$2,299,420.55.

Capitol Heights-Infrastructure Replacement

Status (1999)

The City awarded a contract to Jay Fulkroad & Sons for \$1,950,957 to replace sewer, water, sidewalks, curbs and streets for the Capitol Heights Housing Development Project. All work is to be completed by Mid-2000, so the housing development company can begin construction. The project covers the area bounded by N. Third Street to N. Fourth Street

and Hamilton Street to Kelker Street. Plans and specifications were prepared by Brinjac-Kambic and Associates, Inc.

Status (2000)

The project was completed in December of 2000 and turned over to the City's housing development contractor. The total construction and design cost is \$2,418,591.00.

ELECTRIC DEREGULATION

The City participated with other municipalities in the State through the newly created Municipal Utility Alliance (MUA) of the PA League of Cities and Municipalities (PLCM) to purchase electric power at deregulated rates. MUA issued a Request for Purchase (RFP) for electric rates on behalf of its clients. PP&L Access submitted the best rates in the Harrisburg service area, and the City entered into a two-year contract with that company to purchase electric power. There are over 200 separate accounts in the City for different types of services.

In the year 2000 the City continued to purchase electrical energy through the MUA two-year contract.

CAPITOL CORRIDORS:

The City received HUD grant funding that was supplemented by general revenue bond funds to design and install streetlights, street trees and sidewalk repairs on segments of seven streets. The total project costs are expected to be in excess of \$4,584,688. The streetlight fixtures selected are an acorn luminaire on top of an aluminum pole. The design replicates the type of fixtures installed in the early 1900's. The following corridors received lights, trees and sidewalk repairs:

Market Street: Cameron to 17th Street

State Street: 13th Street to Parkway Drive

Derry Street: 13th Street to 17th Street

13th Street: State Street to South of Berryhill Street

17th Street: State Street to South of Brookwood Street

3rd Street: Reily Street to Seneca Street

6th Street: Maclay Street to Division Street

Reily Street: 3rd Street to 6th Street

Calder Street: 3rd Street to 6th Street

Marion Street: Reily Street to Calder Street

Williams Street: Reily Street to Calder Street

4th Street: Reily Street to Calder Street

Status (2002)

The project was completed, except for minor punchlist items in Dec 2002.

HARRISBURG AREA TRANSPORTATION STUDY GROUP (HATS) APPROVED PROJECTS:

The HATS Group approved several projects for addition to the Harrisburg Area Transportation Improvement Plan (TIP) with preliminary funding available in the first year of the 12-year plan. All projects are approved for 80% federal and 20% local (City) funding unless otherwise noted.

- Lighting Upgrade, Market Street Bridge over the Susquehanna River was selected in the Transportation Enhancement category at a total estimated cost of \$672,000. During the field view of the project, required repairs to the structure were identified that were subsequently funded by the District in the amount of \$251,200. The City funded the design at a cost of \$96,500. A design contract was awarded to the local engineering consulting firm of Brinjac Engineers.

Replicas of the original lantern style lighting was selected to replace the current cobra-head fixtures installed by the Department in the early 1960's, and will be installed between Front Street and City Island while a more conventional style of lighting will be installed between City Island and the west shore. The original lighting at the bridge approach will be refurbished and activated along with the light standards at the west approach. Under-arch lighting will be installed between Front Street and City Island to provide additional light along the riverfront.

Status (2002)

Project design was completed during 2002 and submitted to PENNDOT for review prior to bid.

- The Extension of South Third Street, renamed Southern Gateway, to the south to form a connection with the I-83 entrance/exit ramps and to interconnect with South Second Street and South Front Street was added to the TIP. Environmental Analysis, Preliminary Design and Final Engineering were funded in the amount of \$4,057,500 in the FFY's of 2001, 2003 & 2004.

The engineering Consulting firm of Trans Associates, located in Enola, PA was selected to perform the design of the project. When completed, this project will redefine the transportation system and enhance opportunities for economic development in the south end of the Central Business District.

Status (2002)

During the winter of 2002 the economic evaluation of the City of Harrisburg was completed and report submitted. The objective of the study was to determine future demand and absorption for office space in Harrisburg with a particular focus on class A product for the Central Business District. To assess the demand for office space, the competitive market area was defined, and relevant supply and demand characteristics were examined. A brief review of the competitive hotel market was also conducted to assess, on a preliminary basis, future demand for additional facilities. This information was then utilized in the development of a travel demand forecasting model.

During the Spring and Summer of 2002 the Southern Gateway Project data collection program was completed. This included completion of turn movement counts at 37 downtown intersections, pedestrian counts at 12 intersections in the core of downtown, and travel time runs along the major corridors. Once completed, existing condition analyses were performed and a draft existing conditions report prepared.

Once the data collection program and the economic evaluation were completed, development of the travel demand forecasting model began. This included geocoding of the origin and destination information gathered in 2001.

As part of the Southern Gateway Project's on-going community involvement program, a planning workshop was held on Thursday, September 12, 2002 at the Harrisburg Hilton. The intent of the workshop was to gain a better understanding of the community's vision for the study area, which extends from I-83 at the southern end of the city north to Chestnut Street and from the Susquehanna River east to Norfolk Southern\AMTRAK rail lines. The information obtained from this workshop, plus information gleaned earlier from focus group discussions, formed the basis for the goals and objectives report that was drafted late in 2002.

- The Widening of Seventh Street between Reily Street and Maclay Street was also approved and added to the funded area of the TIP in the amount of \$800,000 in FFY's 2001 & 2004 plus an additional \$3,129,000 in the 2005 TIP for construction.

The engineering consulting firm of Buchar-Horn of York, PA was selected to design the project. This four-lane entrance to the City from the north is intended to entice commuters to access the Central Business District along that route rather than use the Front Street-Second Street one-way corridors. The reduction in traffic volume will allow two-way traffic along Second Street and perhaps Front Street.

Status (2002)

Notice to Proceed was issued April 1, 2002. Field survey, traffic analysis, environmental testing, and environmental documentation are now completed. Preliminary bridge rehab plans, lighting plans, construction plans and right-of-way plans were completed and submitted to PennDOT for review.

- Dauphin County Commissioners provided the 20% local match. A check for \$700,000 was received from the County for this purpose. The fourth project added to the TIP using a combination of State Bridge Funds, Federal Funds and Local Funds is the replacement of the

ramp and repair of parapet walls and lighting on the Mulberry Street Bridge. Design was funded at \$181,466.12. The engineering consulting firm of Pennoni Associates, Inc. of Camp Hill, PA was selected to design the project.

Status (2002)

The consultant completed preliminary engineering to the point of submission of the Type, Size & Location submission. PENNDOT Safety Review Committee accepted the consultant's design solution and authorized the City to proceed to final design subject to identification of additional funding. The final design solution requires an expenditure of approximately \$1,300,000, but there is only \$600,000 approved for construction in the TIP.

- Five traffic signal installations were also approved and added to the TIP. Since the basis for these warrants was based on safety, they are fully funded with federal funds. The signals are approved for the following intersections:

19th Street and Sycamore Street

5th Street and Walnut Street

State Street and Reservoir Park Entrance

Derry Street at 13th Street and 17th Street (left turn lanes and signals)

Cameron Street and Calder Street (funded in 2002 fiscal year)

The installation of traffic signals at major intersections was also authorized by HATS at 100% Federal funding because they are safety related. Design was started by PennDOT's consultant with expected installation during 2002 for signals at Fifth and Walnut Street, Nineteenth and Sycamore Street, State Street at Reservoir Park Entrance and Cameron and Calder Street. The signals at Thirteenth, Seventeenth and Derry Street will be modified to provide turn lanes where appropriate and pedestrian crossing signals. All installations will use LED signal heads.

Status (2002)

All five projects were readied for construction during the year, but delay in Federal Appropriation Bill for FFY 2003 required postponement of construction bids.

- The replacement of twenty-three existing traffic signals was approved by HATS in 2002. The \$520,000 needed for design is listed on the FFY 2003 TIP and \$2,489,000 of the construction funding is listed in FFY years 2004 through 2006. The design and construction of these signal replacements is 100% Federally funded. The twenty-three (23) signal replacements will be designed and constructed in five (5) separate corridors as follows:

Maclay Street Corridor

Maclay & Front
Maclay & Second
Maclay & Third
Maclay & Fourth
Maclay & Sixth

Sixth Street Corridor

Sixth & Division
Sixth & Schuylkill
Sixth & Reily
Sixth & Verbeke
Reily & Third

Market Street Corridor

Market & Seventeenth
Market & Nineteenth
Market & Hale
Twenty-fifth & Rudy Road

Seventeenth Street Corridor

Seventeenth & Brookwood
Seventeenth & Berryhill
Seventeenth & Walnut
Seventeenth & Herr
Seventeenth & SR 0022
Herr & Twentieth

Thirteenth Street Corridor

Thirteenth & Berryhill
Thirteenth & Walnut
Thirteenth Market

Due to high numbers of signal related accidents, the Maclay Street and Market Street signal corridors will be constructed in FFY years 2004 and 2005. Replacement of the Sixth Street, Seventeenth Street, and Thirteenth Streets signals will follow respectively in FFY years 2006 and 2007.

PROJECT LISTING

Attached are status reports of projects that were in progress or completed during 2002.

REQUESTS FOR CHANGES TO TRAFFIC CONTROL SYSTEM

The staff routinely performs engineering studies in response to requests from citizens for changes to the traffic control system such as installation of stop signs, change of one-way streets and so on. Attached is a listing of the studies performed and changes made during 2002.

City of Harrisburg
Office of The City Engineer
Project List 2002

Project Name	Source-Contract Amount	Completion Scheduled	Status	% Complete	Remarks:
Market Street Bridge Lighting	CAPS \$96,500.00 Federal \$924,000.00			Construction	Bids Rejected By PennDOT-Rebid Set For 1/9/03
Capitol Corridors	C \$2,958,603.85 MC \$1,626,084.00		Construction	99%	PPL Removing Poles
City Walking Tour	S\$51,240.00 S\$57,780.00			100%	Manufacturing of Signs, Phase IV Completed—Awaiting Installation
Welcome Signs	S \$120,000.00		Construction	%	Construction Contract Awarded To Rogele, Inc.
Southern Gateway (Study)	Federal \$720,000.00		Preliminary Engineering	60%	
80%/20% Federal/Local Funding	CAPS \$180,000.00		Final Design		
Mulberry Street Bridge Ramp Replacement	State \$145,172.90			87%	PennDOT Scope Revised-Will Do Ramp Only-Main Bridge To Be Programmed In Next TIP Revision
80%/20% Federal/Local Funding	CAPS \$36,293.22				
Seventh Street Widening	F/S \$3,128,000		Design	75%	
CBD Streetscape	S Undetermined Amt.		Pre-Design		\$3.1 Million State Funds Available--Will Apply to PIB for Balance of Funds
Intersection Repair, State Street @ Res. Park	CAPS \$450,000				Will Apply for PA Infrastructure Bank Funds
Traffic Signal State @ Reservoir Park	F \$100,000		Design	100%	100% FHWA Funding

Note: C-Community and Block Development Grant
CAPS-City Capital Improvement Funds
F-FHWA Grant (80% Cost)
G-City General Fund
S-Special Fund
D-DEP Grant
MC-Municipal Capital

City of Harrisburg
Office of The City Engineer
Project List 2002

Project Name	Source-Contract Amount	Completion Scheduled	Status	% Complete	Remarks:
Traffic Signal Installation 19 th and Sycamore	F\$100,000		Construction	0%	Pre-Construction Meeting 1/14/03
1633 N. 6 th Street Site Improvements	\$132,800				Will Apply for PIB Funds
LED Traffic Signal Lenses	\$135,000				Will Apply for PIB Funds
Traffic Signal Corridor Design	F\$520,000				Consultant Selection Approved
Traffic Signal Installation 13 th & 17 th and Derry	F \$200,000		Bid	100%	HATS Approved Additional Funding
Traffic Signal Installation Cameron & Calder	F \$120,000		Design	95%	Bid Opening Date, March 13, 2003
Traffic Signal Installation Fifth & Walnut	F \$100,000		Design	95%	Bid Opening Date, March 13, 2003
Paxton Creek Watershed Analysis	D \$183,120	12/02	In Progress	80%	
GIS Enhancement	G \$100,000	12/02	In Progress	92%	
GIS Enhancement-Real Estate	S \$12,500		In Progress	29%	
Install Street Name Signs on Traffic Signal Mast Arms	G \$17,400		Design	100%	Bids Rejected
Streetlight Maintenance Contract-2 nd of 10 Years	G \$159,617	06/03	In Progress	16%	First Year Relamping Completed
Flood Plain Map, Paxton Creek	FEMA Grant	\$60,000	In Progress	50%	

Note:

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City of Harrisburg
Office of the City Engineer
Completed Projects 2002

PROJECT	STATUS
Reconstruct Wallace & Boyd Streets	Completed

City of Harrisburg
Office of the City Engineer
Traffic Studies, Status Report 2002

PROJECT LOCATION	CHANGE REQUESTED	REMARKS
Jefferson Street	No Tractor Trailor Parking	To Council
6 th , Hoffman to Alricks	Convert to One-Way Traffic	Returned to Petitioner for Additional Signatures
1600 Block Wallace Street	Change from One-Way to Two Way Traffic	To Council
100 Block Schuylkill	Remove “No Parking” Signs	To Law Bureau
Birchfield & Holly Street	Stop Sign Installation	To Law Bureau
100 Block S. River Alley	Change One-Way Direction	To Law Bureau
Knox & Goodyear Streets	Install Stop Sign	To Law Bureau

City of Harrisburg
Office of the City Engineer
Completed Traffic Studies 2002

PROJECT	STATUS
5 th & Market Safety Improvements	Completed
Moltke Alley	Completed
1400 Block Wayne Street	Completed
Rumson Drive	Completed

City of Harrisburg

Office of the City Engineer

Monthly Report-2002

City Light Maintenance Report-June2001 through May 2002				
Month	Total Calls	PA One Calls	Maintenance Calls	Knockdowns, Vandalism, Etc.
June	29	20	8	1
July	67	42	18	7
August	149	62	78	9
September	115	41	65	9
October	108	27	76	5
November	209	32	174	3
December	146	19	121	6
January	171	34	124	13
February	146	22	121	3
March	105	34	64	7
April	116	25	88	3
May	94	41	47	6
Totals	1455	399	984	72

OFFICE OF CITY ENGINEER

The Office of City Engineer is a resource that is interdepartmental in scope and function. This office consults with all City agencies involved in infrastructure repairs, replacements, modifications or additions. The Harrisburg Authority and Harrisburg Parking Authority also coordinate infrastructure improvement projects with the City Engineer. The Office is responsible for review of plans and specifications for subdivision and land development project infrastructure improvements to assure compliance with City ordinances, state laws, and good engineering practices. This office is responsible for establishing the scope of work for paving, storm drainage and utility repair/replacement projects. The City Engineer acts as liaison with the Pennsylvania Department of Transportation (PennDOT) District Engineer to plan, coordinate and review all highway and traffic control projects on state roads and bridges within City limits and all capital improvement projects that are constructed in partnership with PennDOT on a cost sharing basis. The office performs all required traffic studies to justify the establishment of traffic control devices, including, but not limited to the following: stop signs, traffic signals, pedestrian crossings, one-way and two-way traffic and restricted or public parking areas. The City Engineer is a member of the Board of Advisors of the Local Transportation Assistance Program (LTAP) that is sponsored by PennDOT and Penn State University and represents the City on the Harrisburg Area Transportation Study (HATS) Technical and Coordinating Committees.

This office issues and controls street cut permits and construction/maintenance bonds in the City, and inspects/approves the work of contractors working on City streets for paving, pipeline and parking lot projects. Engineering Representatives are assigned to assure compliance with state and local street cut regulations and to assure proper flow of traffic around work areas. Staff also obtains State Highway Occupancy Permits for all work performed on City-owned utilities located within state highway rights-of-way. The Registrar of Real Estate maintains a current file of real property deeds. This includes preparation and maintenance of City plot plans and accurate record keeping for every change in property ownership in the City.

EXPENDITURE ANALYSIS DETAIL 2002 BUDGET				
General Fund		0107 City Engineer's Office		
Allocation Plan		Position Control		
		JOB CLASSIFICATION	2002 BUDGET	ALLOCATION
PERSONNEL SERVICES				
Salaries-Mgmt	95,007	City Engineer	1	59,424
Salaries-BU	74,953	Civil Engineer	1	35,583
Salaries - Part-Time	10,664			
Overtime	1,924	Total Management	2	95,007
Fringe Benefits	39,208			
TOTAL	221,756	Engineer's Representative III	1	39,254
		Registrar of Real Estate III	1	35,699
OPERATING EXPENSES		Total Bargaining Unit	2	74,953
Communications	3,700			
Professional Fees	127,600	College Intern	2	10,664
Utilities	425,080			
Insurance	0	Total Part-Time	2	10,664
Rentals	0			
Maintenance & Repairs	160,200	Overtime		1,924
Other Contracted Services	21,505			
Supplies Expense	2,150	FICA		13,964
		Fringe Benefits		25,244
TOTAL	740,235	Total Fringe Benefits		39,208
CAPITAL OUTLAY	913,097			
TOTAL APPROPRIATION	1,875,088	TOTAL	6	221,756